

# BUILDING NEVADA'S FUTURE:

## A Master Plan for Higher Education in Nevada

April 2002



UNIVERSITY AND COMMUNITY COLLEGE SYSTEM OF NEVADA

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## EXECUTIVE SUMMARY

Six over-arching, interrelated goals are established for the University and Community College System of Nevada to support Nevada's growth and development as a state:

- **Goal 1: Through instruction, research, and service, higher education in Nevada will be an essential element in developing and sustaining a strong, dynamic, knowledge-based economy for Nevada.**
- **Goal 2: Nevada's system of higher education will provide consistently excellent learning experiences for its students through instruction, research, and service.**
- **Goal 3: Nevada's system of higher education will increase the overall participation and success of Nevadans enrolling in higher education at all levels of education and in all ethnic groups.**
- **Goal 4: Nevada's system of higher education will provide programs and services that address the unique educational needs of a highly diverse and non-traditional population.**
- **Goal 5: Higher education will increase partnerships with the K-12 system to provide the cooperative delivery of education from pre-kindergarten through graduate education (P-16).**
- **Goal 6: Higher education in Nevada will be instrumental in advancing society's objectives and enriching the lives of Nevada's citizens.**

These goals are ambitious and establish a roadmap for the future for higher education. Continuous progress toward the goals will be expected, measured, and demonstrated. The goals are not stated in priority order and no single goal stands alone: each is inextricably linked with the others in a variety of ways, as seen through the targets and strategies developed for each goal. Clearly defined benchmarks will be established to measure progress toward each goal. Once benchmarks are established, they will be monitored regularly to make sure there is consistent improvement and steady advancement, both systemwide and by each institution.

The strategies are based on actions the System can take internally and with its partners to improve not only higher education but also P-16 education statewide. This master plan incorporates key findings and recommendations from a study conducted by the RAND Corporation in 2001 as well as a report by the Battelle Memorial Institute issued in 2000.

Implementation of the plan will rely on the efficient use of existing structures and institutions. The UCCSN is committed to reexamining all operations so that the most effective and efficient use is made of every available human, financial, and physical resource. Nevertheless, over the next decade Nevada's economy will require thousands more graduates of the universities, state colleges, and community colleges every year.

The current capacity and funding of the University and Community College System of Nevada is incapable of meeting the increased needs for college-educated workers in the long term. Without reform, the state will become even more dependent on individuals trained outside the state. All youth and adults in Nevada should have the opportunity to gain the postsecondary education they

improving the research capacity of the state's universities and research institute, a capacity which builds new enterprises and attracts high-paying jobs to the state.

Nevada has a choice to make. It can continue funding its higher education system at the present level, thus constricting access even more in the face of intense growth and widening diversity. If Nevada can only fund higher education at roughly its current level, adjusted for inflation, its statewide college-going rate would be reduced from its already low 40 percent to 25 percent. This not only would place Nevada at less than one-half the college-going rate of other western states participating in the Western Interstate Commission on Higher Education (WICHE), it also would place Nevada below almost all developed countries in the world. In reality, participation would likely not decline to this level, because many students would likely look to attend colleges and universities in other states, but the resulting "brain drain" would create other long-term problems for the state. Thus, attention to increasing access to match population growth must necessarily remain a strong focus of any master plan for higher education in Nevada.

Without a significant growth in resources for higher education:

- There will be a growing gap between the number of college graduates needed and the number that will be produced.
- There will also be a gap in the needs of the economy and the research capacity of the universities.
- There will be a widening gap in opportunity in which the poor fall further behind the educational opportunities and accomplishments of wealthier students.

Or, through a shared responsibility model, Nevada can supply the resources necessary to meet the varied educational needs of an expanding and changing population. This Master Plan is founded on the belief that Nevada must pursue a compact between the Regents, its colleges and universities, the state, and its students to step forward, support higher education, and build a bright future.

### Highlights of the Plan

The Master Plan is marked by several key proposals and concepts:

- There is a strong reliance on building a more comprehensive base of effective and collaborative partnerships with K-12, business and industry, and state and federal government.
- A focus is placed on inter-institutional collaboration rather than competition, with rewards and incentives proposed in order achieve this principle.
- There is an emphasis on continuous improvement over time according to established benchmarks.
- Strategies emphasize internal efficiencies that can be made for low-cost or no-cost to the state.
- A public accountability plan for student learning outcomes and institutional effectiveness will be developed.
- Students will be required to have technology-mediated instruction by the time they graduate, thus being better prepared for the world of adult learning.
- All students will have opportunities for internships, cooperative education, international education, or community service experiences in their educational program, experiences which will link them to the community to which they will contribute throughout their life.

## BUILDING NEVADA'S FUTURE

### INTRODUCTION

Historically, Nevada's government has demonstrated a strong commitment to providing support for higher education. Nevada's citizens expect a quality system of higher education that is affordable and serves all segments of society. They expect colleges and universities to play an active role in helping non-traditional and disadvantaged students to succeed. They expect higher education to equip them to compete in the changing workforce. Government and industry leaders expect universities and research institutes to be partners in pursuing research areas that will benefit the state's economic development. Nevada students expect learning experiences that are relevant and rewarding to their lives and careers. Meeting these expectations will demand a comprehensive approach – an integrated network of strategically focused, high performance campuses, each achieving excellence in its own mission under standards of continuous improvement.

#### Challenges to Nevada

This Master Plan recognizes that no other state faces a greater challenge to its higher education system than does Nevada:

- Nevada is the fastest growing state in terms of percentage growth. More than 600,000 new residents are expected in the state by 2010.
- The population growth will be marked by a 40% increase in the Hispanic/Latino population.
- Concurrently, the White/non-Hispanic population will increase by only 15%.
- One-third of Nevada's population will be from underrepresented groups by 2010.
- Nevada trails most other states in the percentage of its high school graduates who enroll in higher education and continue until they successfully earn a degree.
- The educational attainment of Nevada's overall population is below national averages at the associate's and bachelor's degree levels.
- Nevada has a compelling need for basic education and workforce training for its citizens.
- Nevada has very distinct regional differences, both economically and demographically, that affect the delivery of higher education as well as the academic programs offered.
- The distribution of population in Nevada makes it simultaneously one of the most urban states in the nation and one of the most rural.
- Characteristics of the state's demographics and economy as a whole sometimes work against the perceived need for higher education.

The State of Nevada will fail if it does not respond effectively to the inescapable necessity of providing quality educational opportunities to a growing and more diverse population – now and in the future. Recent state-by-state comparisons have placed a spotlight on inadequacies in Nevada's educational system at the same time that unprecedented demand is building for quality services in a lifelong, learner-based, economic environment.

The University and Community College System of Nevada (UCCSN) is committed to using its present resources in the most effective and efficient way possible. With this Master Plan as a framework, the UCCSN will begin the process of change by reexamining and improving the way it conducts higher education in Nevada. With that process underway, the System will turn to students, their families, taxpayers, elementary and secondary educators, and others for additional

resources. Ultimately, however, assuring access to quality education in the challenging era ahead will require more than just the commitment of UCCSN. Achieving the ambitious agenda set out in this Master Plan will require shared responsibility between all of these stakeholders.

## MISSION DIFFERENTIATION

As Nevada grows, so will its system of higher education. Nevada's demographic upsurge compels the University and Community College System of Nevada to determine the most efficient and effective way to manage growth in the best interest of students. No single institution can provide all things to all students. Some students are better served in one educational setting than another. Needless duplication and competition among a relatively small number of institutions do not make the best use of limited resources.

Without clear mission parameters, the strain of explosive growth will compel haphazard, inefficient use of finite public and private resources. With them, reasonable criteria are possible to help the System meet the challenges of the next decade more effectively and efficiently. Consequently, these mission parameters:

- Define distinct missions for the primary components of Nevada's system of higher education.
- Envision a comprehensive role for the community colleges, including the potential for offering baccalaureate-level programs in some limited areas.
- Address a current gap in technical education.
- Call for different but complementary research missions for Nevada's three research institutions, with some common programs and emphases where advantageous and critical to the state's unique characteristics.

**Comprehensive Community Colleges** serve specific regional areas. With an open-door admissions policy, these institutions will emphasize opportunity for all Nevadans to gain access to a quality education. In fulfillment of the community college mission, these institutions offer remedial and developmental education, general education, workforce development, vocational and technical training, and associate degrees that provide seamless transfer to state colleges and universities. In some cases and under specified criteria, these institutions may offer selected niche baccalaureate degrees.

High Tech Centers are associated with the comprehensive community colleges and are located on high school or college campuses. These centers provide linkages with the K-12 educational system and promote economic diversity through workforce development and technology training. The centers may provide beginning-level general education courses and remedial course work to both students currently enrolled in high school and people who wish to continue their education.

**Institutes of Technology** are associated with existing institutions and may offer lower-division and upper-division course work leading to industry certifications as well as associate and baccalaureate degrees in specialized and applied career-technical fields. Through articulation agreements and transfer policies, these institutes serve as the hub for Tech Prep 2+2+2 programs.

**State Colleges** are regional institutions offering comprehensive education at the baccalaureate level in specific, regional niches with limited professional graduate degrees. Admissions policies will define minimum levels of preparation that match the academic focus of the institution.

**Universities** are comprehensive research institutions offering education from the baccalaureate through the master's and doctoral levels. The universities will provide selected graduate and professional programs, and doctoral programs will correlate with defined research and academic strengths. The universities will make significant contributions to new knowledge, economic development, and the culture of the state. Selective admission policies will define specific preparation levels necessary for student success.

A **Research Institute** that focuses on environmental sciences and engages in fundamental and problem-oriented research within an entrepreneurial and academic culture. The Institute will foster interdisciplinary approaches and scientific teaming, improve management of natural resources, and apply technologies to global issues while helping to meet the needs of Nevada. The Institute will not grant degrees but will support the educational programs at other UCCSN campuses by partnering in teaching and mentoring programs, student support, and internships.

These mission guidelines serve as templates to develop policies and criteria that:

- Guide new or expanded teaching and research.
- Provide educational access to Nevada citizens at various levels of instruction.
- Expand alternative delivery systems.
- Increase collaborations with the K-12 system.
- Provide efficient administrative structures.
- Allow the establishment of new institutions upon reaching established thresholds.

### Collaborative Vs. Competitive Model

Many argue today for allowing market forces to address the future needs for higher education through competition for students, research dollars, buildings, and budgets. This method has worked in several states but generally requires a large number of statewide institutions and an overall high level of funding in order to be most effective. Because of Nevada's limited resources, its relatively small number of higher education institutions, and its unique demographic and geographic characteristics, a more collaborative model is viewed as the best response to the challenges of sustaining access and quality in the challenging years ahead.

In a collaborative model it is essential to distinguish and to make clear the missions of the System's various segments so that resources are allocated and programs operated equitably, efficiently, and in a justifiable manner. Clearly defined missions provide the foundation for policies that help match educational supply to the demand for services brought on by growth. But these policies can also provide the stimulus for appropriate competition that improves individual institutions. In some cases – especially in terms of building research strengths – it will be advantageous to deliberately build strength through common programs and emphases.

### Creation of New Institutions

Another important component of mission differentiation is the establishment of minimum thresholds and other necessary policies that must be met prior to forming new public institutions, branch campuses, off-campus centers, or satellite centers. The emphasis always should be on providing the most efficient administrative structures for the delivery of education, locating institutions where best needed, and on cost-effectiveness to the state. The creation of these minimum thresholds, policies, and a master plan for the location of new institutions and other teaching centers in the state will be forwarded to the Board of Regents for consideration and approval no later than January 2003.



## PRINCIPLES, GOALS, AND TARGETS

### Goal 1 A Prosperous Economy

Through instruction, research, and service, higher education in Nevada will be an essential element in developing and sustaining a strong, dynamic, knowledge-based economy for Nevada.

#### Principle:

*All Nevada students should have access to the courses, degrees, training, or credentials needed for entering the workforce of the 21<sup>st</sup> Century and for adapting to changes in the workforce over time.*

#### Principle:

*The future economic success of Nevada depends on an educated, trained workforce and an entrepreneurial environment supported by first-rate higher education.*

#### Targets

- Develop and increase responsive educational programs that focus on state needs and critical shortages in identified fields.
- Increase the proportion of workers and the number of graduates in high-skill fields who come from Nevada's higher education institutions rather than from out of state.
- Increase the leverage of state dollars for research and development by attracting more federal and private support for each state dollar expended for these purposes.
- Increase institutional collaborations with the private sector and target significant research resources to achieve specific economic development objectives.
- Increase and focus workforce development to meet community needs in those sectors with the highest potential for growth.

## Goal 2 Quality Education

Nevada's system of higher education will provide consistently excellent learning experiences for its students through instruction, research, and service.

### Principle:

*High expectations and quality learning experiences help students develop to their fullest potential.*

### Principle:

*Accountability demands that we be measured by our success, not merely our efforts, in each of our endeavors.*

### Targets

- Develop and implement an assessment plan and effective measures of student learning outcomes at each institution and for each academic program. Assessment plans for educational programs will be congruent with the differentiated missions of the institutions. Each plan will be required to define student learning outcomes, assess student performance on those outcomes, and use results to improve teaching and learning.
- Develop effective measures of institutional performance, collect data on the institutional indicators, and demonstrate that the results are used in the planning and evaluation process. These indicators are to include the regular evaluation of programs and justification for program continuation.
- Differentiate the instructional and research missions of Nevada's institutions by creating a System academic master plan and System research plan to define future institutional activities, to guide effective decision-making, and to eliminate unnecessary redundancy.
- Increase the number of rich learning experiences available to students through creative performance, scholarly and research collaboration with faculty, and through community service learning.

### Goal 3 Opportunity for All

Nevada's system of higher education will increase the overall participation and success of Nevadans enrolling in higher education at all levels of education and in all ethnic groups.

#### **Principle:**

*All students should be given the opportunity to be successful and to complete a degree or credential if that is their goal.*

#### Targets

- Raise the percentage of Nevada's high school graduates who continue into postsecondary education. Progress will be measured against the 2001 WICHE median as an initial benchmark.
- Increase the percentage of Nevada's general population who participate in some form of higher education, whether through coursework, workforce training, certificate programs, lifelong learning, or degree programs. Continuous improvement toward the national averages for educational attainment, based on 2000 Census data, will serve as Nevada's benchmark.
- Bring participation in higher education by under-represented racial and ethnic groups into parity with the Caucasian population in Nevada. Progress will be measured against Nevada Census data and UCCSN enrollment statistics.
- Increase the percentage of students who successfully complete bachelor's degrees in six years and increase the percentage of community college students who complete associate degrees in three years. Progress will be measured against the 2001 WICHE median as an initial benchmark.

## Goal 4 Accessible Education

Nevada's system of higher education will provide programs and services that address the unique educational needs of a highly diverse and non-traditional population.

### Principle:

*Lifelong learning is a noble endeavor, and providing multiple and varied opportunities is necessary for a citizenry that must continuously adapt to changing societal and economic conditions.*

### Principle:

*Higher education should provide flexible and innovative scheduling and delivery systems designed to meet the educational needs of Nevadans.*

### Targets

- Increase programs and courses designed to meet the needs of working adults.
- Increase programs and courses designed to meet the needs of under-represented groups.
- Increase need-based financial aid for Nevada students.
- Expand the use of shared, new, and existing facilities on weekdays, evenings, weekends, and summers for the most cost-effective delivery of education.
- Expand distance education offerings so that, on average, all students will have participated in some technology-mediated instruction prior to graduation.

## Goal 5 P-16 Education

Higher education will increase partnerships with the K-12 system to ensure the cooperative delivery of education from pre-kindergarten through college degrees.

### Principle:

*Success in higher education is a joint endeavor that begins at pre-kindergarten and continues to grade 16 and beyond, with seamless transitions and articulation throughout all levels of education.*

### Targets

- Increase P-16 programs that provide seamless transitions and result in student success in college.
- Through P-16 efforts, decrease the percent of recent Nevada high school graduates taking remedial/developmental courses.

## Goal 6 Building Quality of Life

Higher education in Nevada will be instrumental in advancing society's objectives and enriching the lives of Nevada's citizens.

### **Principle:**

*Higher education enriches the quality of life for Nevadans through benefits from research, the arts, the humanities, civic engagement, faculty service, and educated alumni.*

### Targets

- Increase public service and cultural opportunities that position higher education institutions as intellectual, cultural, and artistic centers and as the “marketplace for ideas.”
- Ensure that all students have an opportunity to experience some form of internship, cooperative education, or community service in their educational programs.
- Improve Nevada’s “educational benefits” measure on the National Center for Public Policy and Higher Education’s Report Card from a C minus to at least a B grade.
- Ensure that all students have an opportunity to increase their understanding of other cultures through their educational programs and activities.

## ENROLLMENT PROJECTIONS

In order to provide policy makers with choices in determining how much can be accomplished under this Master Plan, the University and Community College System of Nevada has developed three options for enrollment planning.

### Option 1 Increased College Participation

The enrollment projections under Option 1 incorporate three principles consistent with the ultimate objectives of this plan:

- There is an increase in productivity as measured by the annual average FTE (AAFTE) generated per headcount.
- There is an increase in the college participation rate as seen in the increasing headcount per 1,000 population.
- The year-to-year growth in headcount exceeds the year-to-year growth in high school graduates.

### INCREASED COLLEGE PARTICIPATION

Campus Enrollment Plans					Ratio: AAFTE per Headcount	Headcount Enrollment per 1000 population
Fall Term Headcount		Annual Average Full-time Equivalent (AAFTE)				
Actual	1990	61,480	1990-1991	30,620	0.4980	50
	1991	63,054	1991-1992	33,544	0.5320	49
	1992	65,816	1992-1993	35,131	0.5338	49
	1993	65,124	1993-1994	34,672	0.5324	47
	1994	65,598	1994-1995	34,903	0.5321	44
	1995	68,230	1995-1996	36,584	0.5362	43
	1996	74,655	1996-1997	39,601	0.5305	44
	1997	78,407	1997-1998	42,013	0.5358	44
	1998	82,666	1998-1999	44,199	0.5347	45
	1999	88,617	1999-2000	46,809	0.5282	45
	2000	87,941	2000-2001	48,101	0.5470	43
2001	90,080	2001-2002	49,627	0.5509	42	
Planned	2002	96,212	2002-2003	53,371	0.5547	43
	2003	102,427	2003-2004	57,303	0.5595	45
	2004	107,145	2004-2005	60,356	0.5633	46
	2005	111,800	2005-2006	63,977	0.5722	47
	2006	117,067	2006-2007	67,616	0.5776	48
	2007	123,019	2007-2008	71,682	0.5827	49
	2008	129,143	2008-2009	75,945	0.5881	51
	2009	135,639	2009-2010	80,474	0.5933	53
	2010	142,137	2010-2011	85,129	0.5989	54

## Option 2 Maintain Current Level of Participation

In 2001, the overall enrollment per 1,000 population was 42 students. Option 2 is based on the assumption that the UCCSN will continue to enroll 42 students per 1,000 population. The headcount enrollment for 2002-2010 was calculated based on the projected population and the service number of 42 per 1,000. The AAFTE was then estimated based on the headcount and a constant headcount to AAFTE ratio of .5509. The ratio of .5509 is the ratio in 2001-2002.

This approach allows the enrollment to grow as the population grows, but it does not increase the participation rate or the AAFTE productivity per headcount. Because the year-to-year growth rate on this plan is less than the anticipated growth rate among high school graduates, Option 2 will likely result in a worsening of the college continuation rate. Overall, Option 2 yields approximately 24,700 fewer (-29%) AAFTE in 2010 than does Option 1. In addition, Option 2 serves nearly 32,500 fewer (-23%) students than Option 1.

### MAINTAIN CURRENT PARTICIPATION

Campus Enrollment Plans					Ratio: AAFTE per Headcount	Headcount Enrollment per 1000 population
Fall Term Headcount		Annual Average Full-time Equivalent (AAFTE)				
Actual	1990	61,480	1990-1991	30,620	0.4980	50
	1991	63,054	1991-1992	33,544	0.5320	49
	1992	65,816	1992-1993	35,131	0.5338	49
	1993	65,124	1993-1994	34,672	0.5324	47
	1994	65,598	1994-1995	34,903	0.5321	44
	1995	68,230	1995-1996	36,584	0.5362	43
	1996	74,655	1996-1997	39,601	0.5305	44
	1997	78,407	1997-1998	42,013	0.5358	44
	1998	82,666	1998-1999	44,199	0.5347	45
	1999	88,617	1999-2000	46,809	0.5282	45
	2000	87,941	2000-2001	48,101	0.5470	43
2001	90,080	2001-2002	49,627	0.5509	42	
Planned	2002	93,022	2002-2003	51,246	0.5509	42
	2003	95,830	2003-2004	52,793	0.5509	42
	2004	98,506	2004-2005	54,267	0.5509	42
	2005	100,888	2005-2006	55,579	0.5509	42
	2006	102,995	2006-2007	56,740	0.5509	42
	2007	104,851	2007-2008	57,762	0.5509	42
	2008	106,217	2008-2009	58,515	0.5509	42
	2009	107,861	2009-2010	59,421	0.5509	42
	2010	109,681	2010-2011	60,423	0.5509	42



### Option 3 Enrollment Caps

Projections under Option 3 assume no enrollment growth and consequently require support adequate to cover increases due to inflation and other fixed costs. This option caps enrollments at the levels in 2001-2002. Clearly, this option results in a very sharp decline in the college participation and college continuation rates. By 2010, Option 3 results in approximately 35,500 fewer (-42%) AAFTE than Option 1, and 10,800 fewer (-18%) than Option 2. In addition, Option 3 serves nearly 52,000 fewer (-37%) students than Option 1 and 19,600 fewer students (-18%) than Option 2.

#### ENROLLMENT CAPS

Campus Enrollment Plans					Ratio: AAFTE per Headcount	Headcount Enrollment per 1000 population
Fall Term Headcount		Annual Average Full-time Equivalent (AAFTE)				
Actual	1990	61,480	1990-1991	30,620	0.4980	50
	1991	63,054	1991-1992	33,544	0.5320	49
	1992	65,816	1992-1993	35,131	0.5338	49
	1993	65,124	1993-1994	34,672	0.5324	47
	1994	65,598	1994-1995	34,903	0.5321	44
	1995	68,230	1995-1996	36,584	0.5362	43
	1996	74,655	1996-1997	39,601	0.5305	44
	1997	78,407	1997-1998	42,013	0.5358	44
	1998	82,666	1998-1999	44,199	0.5347	45
	1999	88,617	1999-2000	46,809	0.5282	45
	2000	87,941	2000-2001	48,101	0.5470	43
2001	90,080	2001-2002	49,627	0.5509	42	
Planned	2002	90,080	2002-2003	49,627	0.5509	41
	2003	90,080	2003-2004	49,627	0.5509	39
	2004	90,080	2004-2005	49,627	0.5509	38
	2005	90,080	2005-2006	49,627	0.5509	38
	2006	90,080	2006-2007	49,627	0.5509	37
	2007	90,080	2007-2008	49,627	0.5509	36
	2008	90,080	2008-2009	49,627	0.5509	36
	2009	90,080	2009-2010	49,627	0.5509	35
	2010	90,080	2010-2011	49,627	0.5509	34

## FINANCING SCENARIOS

Virtually all partners in this venture into the future of higher education in Nevada will need to invest substantial real and hard-to-find dollars over the next decade, to ensure that the state can indeed achieve its mission of providing high quality learning opportunities to all who can and wish to benefit from such an experience. Through a shared responsibility model, Nevada can supply the resources necessary to meet this challenge. Regardless of which enrollment planning model Nevada chooses to follow, major contributions will need to be made by the colleges and universities, the state, students and their families, federal sources, business and industry, and the community.

### Option 1 Increased College Participation

Option 1 forecasts enrollments that correspond to the goal and strategies of increased participation and diversity within our student body. This forecast predicts a headcount of 142,317 and an annual average full time equivalent (AAFTE) count of 85,129 by year 2010-2011. This represents a 77% increase over that 10-year period, or more than 37,000 additional AAFTE. Under this option, enrollment would grow at an accelerated rate when compared to the previous 10 years.

Since the enrollment under this option would increase by 77%, one would expect the costs, in current dollars, to grow at the same rate for those areas of the higher education spectrum that are sensitive to enrollment changes, while the functions not driven by growth would increase at a level that corresponds more closely to inflation only. Based on these assumptions, by year 2010-2011, the UCCSN would need an additional \$566 million to meet this growth plus modest inflation. Anticipated increases in enrollment would supply a portion of this need, and the balance would have to come from increasing student fee rates, internal productivity improvements, and state funds. Assuming the ratio of funding sources remains the same in 2011 as it is today, the shares of these costs are reflected in the following table.

Year	Total Budget	State Share	Student/Other
2001	\$459.6	\$344.7	\$114.9
2011	\$1,025.9	\$769.4	\$256.5

(in millions)

### Option 2 Maintain Current Level of Participation

The second enrollment management option is to maintain the current participation rate and assume growth would occur at the general population growth rate. This forecast suggests a significantly lower enrollment 10 years out – reaching 60,423 in year 2010-2011 – but it would not enhance higher education in the state. At this growth rate, UCCSN would experience a 26% increase in student AAFTE by the tenth year, increasing costs by about \$294 million. This again would be partially offset by increased student fees resulting from the enrollment increase, leaving

the balance to come from increased student fee rates, the state and increases in productivity. Again, assuming the ratio of funding shares remains the same, the outcome for 2011 is reflected in the following table.

<b>Year</b>	<b>Total Budget</b>	<b>State Share</b>	<b>Student/Other</b>
2001	\$459.6	\$345.8	\$113.8
2011	\$753.5	\$565.1	\$188.4

(in millions)

### Option 3 Enrollment Caps

The Option 3 forecast assumes no enrollment growth and requires additional dollars to cover inflation only. Under this option, there would be a modest increase only in resources needed over the next 10 years. Assuming no change in funding shares, the needs would be as follows.

<b>Year</b>	<b>Total Budget</b>	<b>State Share</b>	<b>Student/Other</b>
2001	\$459.6	\$345.8	\$113.8
2011	\$634.5	\$475.9	\$158.6

(in millions)

### Capital Needs

As enrollment grows within the System, the demand for capital projects parallels the growth in operating needs. Unless enrollments are capped, additional facilities—including new institutions or satellite campuses—will be necessary. Current 10-year capital plans for existing institutions total some \$850 million and average more than \$200 million each biennium. These needs will have to be met through a combination of state funds or bonds, UCCSN revenue bonds, and donor funds.

## LOOKING AHEAD

Despite, or perhaps even because of, the major challenges facing the state, Nevada has the opportunity to shape an excellent system of higher education. This Master Plan establishes guideposts by which the UCCSN and its institutions can respond in a timely, resourceful manner to the requirements for educational services of the highest quality.

Success requires the shared partnership and responsibility of other important stakeholders — the Governor and Legislature, students and their families, elementary and secondary educators, the federal government, and business and civic leaders. We will falter in achieving the objectives of increased access and economic and social development if not all are involved.

As noted at the beginning of this Master Plan, the challenges Nevada faces in higher education are, in many respects, unique among the states and also dramatic in their breadth and immediacy. The manner in which the state and the University and Community College of Nevada responds to these challenges will have far-reaching effect on other long-term issues facing the state.

## APPENDICES

Appendices 1 through 6 contain a sample listing of potential strategies that were identified by many external and internal stakeholders throughout the many consultative activities that led to the development of this plan. Some refer to actions that may be taken by the UCCSN, while others are initiatives that some or all of the institutions may implement individually. In all cases, given distinct regional differences in Nevada, strategies must be tailored to respond to the needs and demographics of the particular communities in which each institution is located. In many cases, the strategies relate to actions that require cooperative efforts by higher education entities and their various constituents and partners. The UCCSN and its institutions will implement some of these strategies and develop others in order to meet the targets and attain the goals outlined in this Master Plan. Public reports will be available periodically to communicate progress.

## APPENDIX 1

### Potential Strategies Goal 1

- Expand enrollment capacity and financial aid in key programs to meet Nevada's workforce needs (e.g., Nursing, Teacher Education, etc.), especially through creative offerings.
- Provide new, creative, and flexible training programs for business and industry and establish a system of continuous review and improvement based on changing market needs.
- Establish a program of endowed chairs in research and development through financial partnerships with business, industry, and state government. In a competitive environment, endowed chairs provide a legacy to attract the best professors and researchers and help to build academic strength.
- Stimulate a reward structure for the universities and research institute for successful research and development funding combined with an accountability component that builds upon the successful Applied Research Initiative model.
- Using the EPSCoR program as a model, encourage the universities and research institute to focus research strengths where they can be nationally competitive and contribute to meeting state needs.
- Develop effective faculty workload models that reinforce the goals of the UCCSN master plan.
- Create incentives for faculty to increase their activities with business and industry through workforce development, research programs, and service activities.
- Establish business incubators to promote the creation of new businesses in Nevada.
- Provide resources to address workforce requirements in the five clearly most-needed and five most-desired disciplines or programs where there is sufficient enrollment demand. Institutions should be expected to increase enrollments in these key programs once they are started.
- Focus the creation of new professional programs on areas that serve key occupational needs and adequately fund these programs before approving new requests.
- Require proposals for new, separately funded professional programs (e.g., pharmacy school, academic medical center, etc.) to include an independent feasibility study and business plan.
- Evaluate the effect of the phasing out of federal estate tax dollars and establish strategies for supporting programs currently funded through this source.
- Pursue the creation of selected baccalaureate programs in technology areas to meet industry needs.
- Expand credentialing programs and specific industry certification at all institutions but especially at the community colleges.
- Ensure that high-tech education and training go beyond information technology fields. Such training is increasingly needed in traditional jobs, such as health care, office management, bio-technology, etc.
- Work with other states to promote reciprocity arrangements in fields of high workforce need in Nevada.
- Hire faculty members from the National Academy of Science and the National Academy of Engineering to advance the research agendas and external funding opportunities of the universities and research institute.

## APPENDIX 2

### Potential Strategies Goal 2

- Define, measure, and reward institutions for their success in several specific areas of accountability. Examples could include improvement in time-to-degree, credit-to-degree, transfer rates, and graduation rates.
- Approve new academic programs only if a strong case can be made based on student demand, unmet workforce needs, or compatibility to research agendas and the overall mission of the institution.
- Create an effective and comprehensive data warehousing center for collecting institutional data and monitoring institutional effectiveness statewide.
- Encourage the development of innovative, collaborative academic programs between institutions.
- Develop graduate programs that are linked to the strategic development of research areas.
- Improve advising and mentoring programs for all students, but especially for non-traditional and underrepresented students.
- Create or expand faculty training programs at each institution in order to improve teaching excellence. The training programs should also be made available to part-time instructors and to graduate assistants.
- Hire excellent and ethnically diverse employees into faculty and staff positions.
- Encourage campuses to provide integrated classroom learning experiences that emphasize faculty-student collaboration rather than mere seat-time.
- Establish a strong program to review existing programs at all levels of instruction, with the use of statewide standards that incorporate consequences for both accomplishments and deficiencies.
- Employ enrollment management techniques to enroll more students in community colleges and state colleges in order to provide educational opportunities at the lowest cost per student.
- Evaluate the usage and cost-benefits of satellite instructional sites to ensure maximum use of resources.
- Expand the provision of administrative services through technology to reduce the need for new staff.
- Integrate “sustainability” (health and environmental factors) into institutional planning and facilities management for the efficient operation of facilities and to conserve resources.
- Develop capital requests that respond to the needs of the 21<sup>st</sup> century and further the goals and strategies of this master plan.

## APPENDIX 3

### Potential Strategies Goal 3

- Increase recruitment efforts in the elementary and middle schools.
- Reevaluate and, where possible, reduce the number of credits required in individual academic programs and reduce the extra credits that students obtain because of transfer issues or faulty advising.
- Evaluate and improve retention strategies in order to keep students in the higher education system until their educational goals are reached.
- Increase and maintain effective articulation among the community colleges, state college, and universities. Examples include 2+2 programs, common course numbering, and guaranteed transfer programs.
- Evaluate the effect of the Millennium Scholarship Program on long-term enrollment and programmatic goals.
- Establish new, long-term, and creative programs of need-based financial aid to complement the Millennium Scholarship Program.
- Support future efforts by one or more private institutions to establish a campus in Nevada in order to provide additional in-state pathways to higher education.
- Develop effective advising and support systems for students.
- Employ effective and creative enrollment management strategies to ensure that an appropriate number of required classes and individual sections are offered each term at a variety of times and in a variety of formats.



## APPENDIX 4

### Potential Strategies Goal 4

- Develop more substantive school-to-career connections through stronger work-study programs, vocational training, workforce development, internships, community service, and related initiatives in collaboration with K-12, government, businesses, and community leaders.
- Establish new programs and increase funding to existing programs that guide and assist underrepresented populations to greater success in higher education. Examples of successful existing programs include GEAR-UP and TRIO/Upward Bound.
- Establish alternative methods for delivering education in flexible components (e.g., short courses, weekend programs, executive programs) that vary from the traditional 16-week semester and provide effective support services to fit these formats. Where possible, adopt existing for-profit models.
- Adapt educational programs and modes of delivery to address the specific needs of rural areas of the state.
- Reward institutions for meeting their established targets for student recruitment and faculty/staff hiring from among underrepresented groups.
- Increase the number of bilingual advisors.
- Pursue distance education consortiums with out-of-state institutions in order to provide more choices for non-traditional and rural students.
- Encourage institutions to adopt mentoring programs to ease the college transition for underrepresented and non-traditional students.
- Develop responsive programs of vocational/technical education and continuing education in collaboration with business and industry for students who wish to pursue a credential rather than a degree.

## APPENDIX 5

### Potential Strategies Goal 5

- Strengthen linkages with the K-12 system to improve graduation rates and the preparation of middle school and high school students for success in postsecondary education. Dual enrollment programs, high schools on community college campuses, Advanced Placement programs, GEAR-UP, the Reading Excellence Program, and the American Diploma Project are potential models to help achieve this objective.
- Establish collaborative programs with K-12 educators to reduce the amount of remedial work needed by recent high school graduates and to encourage enrollment in college-preparatory courses. Where possible, coordinate early testing for college readiness with high school proficiency examinations.
- Expand existing programs for early enrollment and dual enrollment of high school students in college courses.
- Collaborate with K-12 educators to advise and prepare students in elementary and middle schools to take college preparatory course work in high school.
- Encourage students from Nevada's higher education institutions to volunteer as mentors and tutors in K-12 grades.
- Coordinate educational offerings with the needs of business and industry to provide collaborative employee training programs and apprenticeships.

## APPENDIX 6

### Potential Strategies Goal 6

- Integrate community service activities into each student's academic experience and make these activities available outside of academic programs as well.
- Encourage students to participate in international education in order to develop cross-cultural understanding.
- Encourage and increase participation in travel-abroad programs.
- Encourage faculty to apply their knowledge and expertise to state, regional, and national concerns, and reward them for doing so.
- Expand opportunities for continuing education and lifelong learning, especially through distance education and the internet.
- Make available a wide variety of cultural and arts activities to the general public. These activities should represent the best of every culture in the world.
- Provide opportunities for forums and debates that inform and educate the general public about civic, public interest, and topical events.

APPENDIX 7

Nevada Statistics

*(Statistics listed below available from UCCSN, 2601 Enterprise Road, Reno NV 89512)*

**Population of Nevada by County, 1990-2010**

**Nevada Public High School Graduates by County, 1990-2001**

**Percent Distributions of Nevada High School Graduates and UCCSN Undergraduate Students by Race/Ethnic Composition, 1988-2000**

**College Continuation Rates by State, 1998**

**Emigration Rate for State Resident Freshmen, 1998**

**Educational Attainment, Nevada and United States, 2000**

**Enrollment of Nevada High School Graduates in Postsecondary Education, 1992-1998**

**Changes in Nevada's Population and Options for Future Enrollments at the UCCSN, Percent Changes 1990-2010**

**Historical and Alternative College Participation Rates, 1990-2010**

**Percent Changes in Enrollment and Population in Northern and Southern Nevada, 1990-2001**

## A NOTE ON SOURCES

This Master Plan reflects nearly two years of research, thought, and discussion among the Regents and its staff, the UCCSN Chancellor and her staff, college and university stakeholders across the state, community participants, statewide committees, and contributions from consultants and colleagues in higher education in Nevada, the Western region, and the nation.

The most useful studies and reports consulted in the writing of this plan included:

- *The Road Less Traveled: Redesigning the Higher Education System of Nevada* by RAND's Council for Aid to Education, March 2001.
- *A Technology Strategy for Nevada* by the Battelle Memorial Institute's Technology Partnership Practice, December 2000.
- *Measuring Up 2000: The State-by-State Report Card for Higher Education* by the National Center for Public Policy and Higher Education, 2000.
- *Population and Occupational Information* by Nevada State Demographer's Office, June 2000.
- *Policy Indicators for Higher Education: WICHE States* by the Western Interstate Commission for Higher Education, November 2000.
- *Postsecondary Education Opportunity*, 1998.
- *Census 2000*, United States Census Bureau.